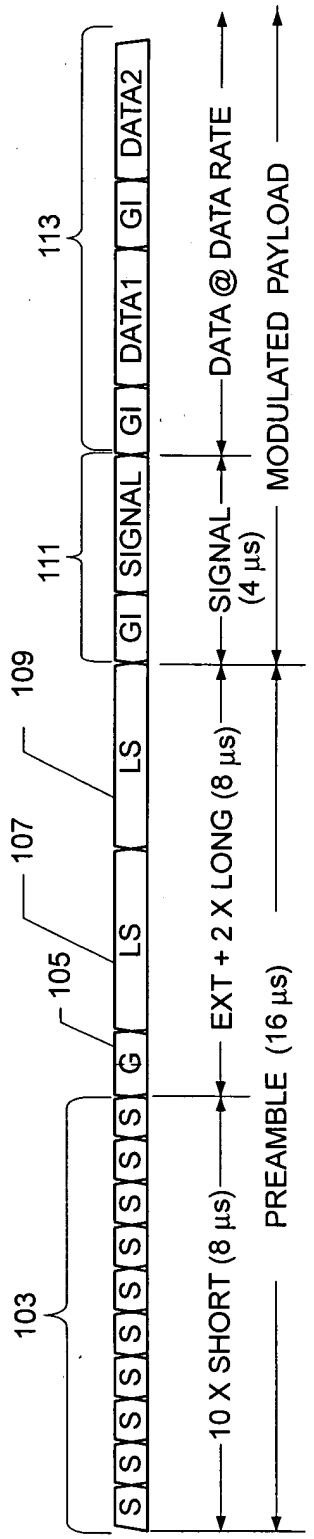

FIG. 1
(PRIOR ART)

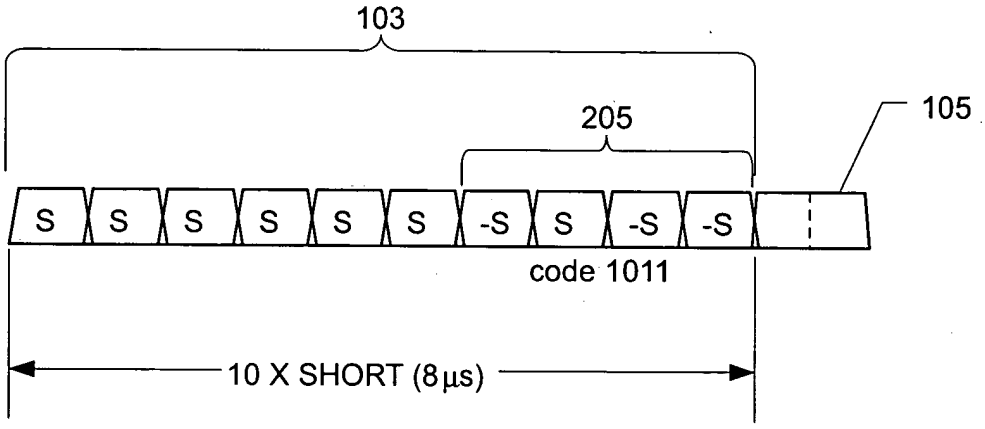
103
205
105
S
S
S
S
S
S
-S
S
-S
-S
code 1011
10 X SHORT (8 µs)

FIG. 2A

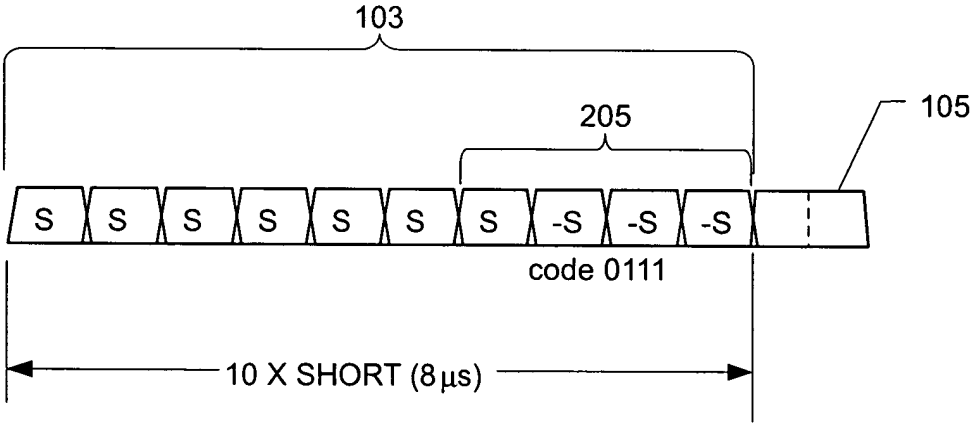
103
205
105
S
S
S
S
S
S
S
-S
-S
-S
code 0111
10 X SHORT (8 µs)

FIG. 2B

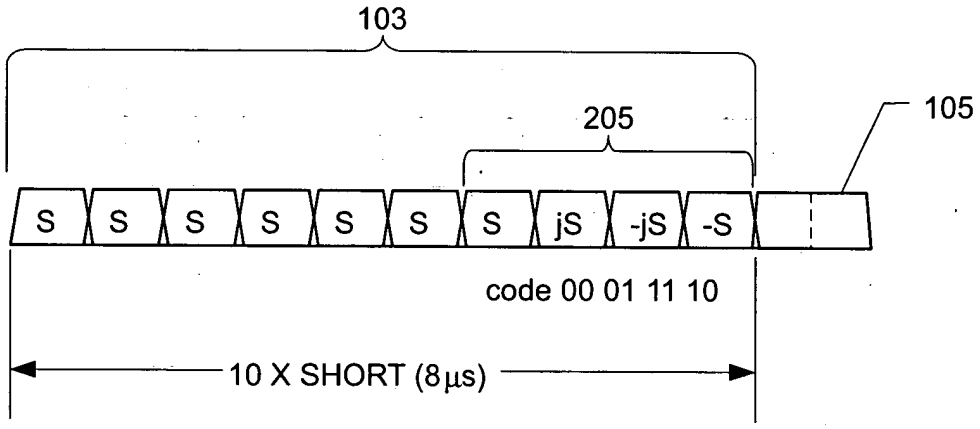
103
205
105
S
S
S
S
S
S
S
jS
-jS
-S
code 00 01 11 10
10 X SHORT (8μs)

FIG. 3A

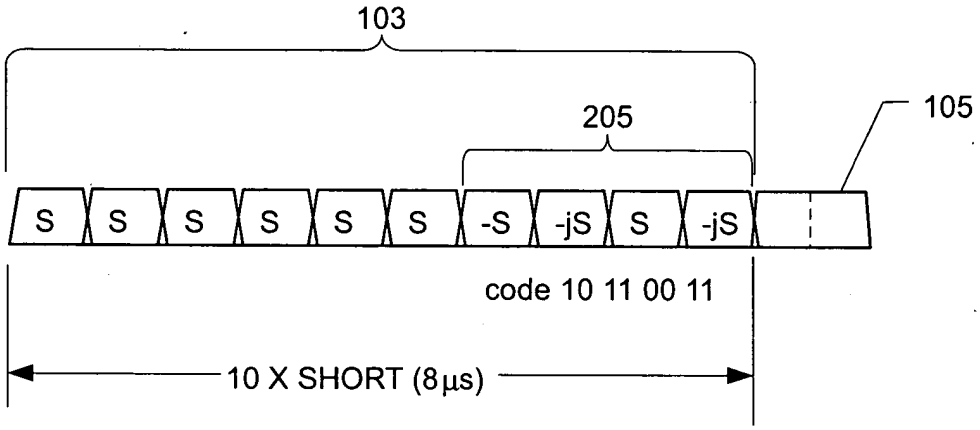
103
205
105
S
S
S
S
S
S
-S
-jS
S
-jS
code 10 11 00 11
10 X SHORT (8μs)

FIG. 3B

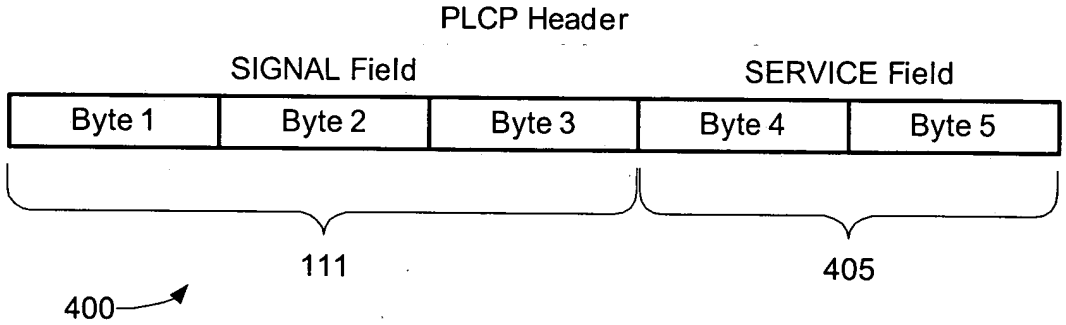

FIG. 4A (Prior Art)

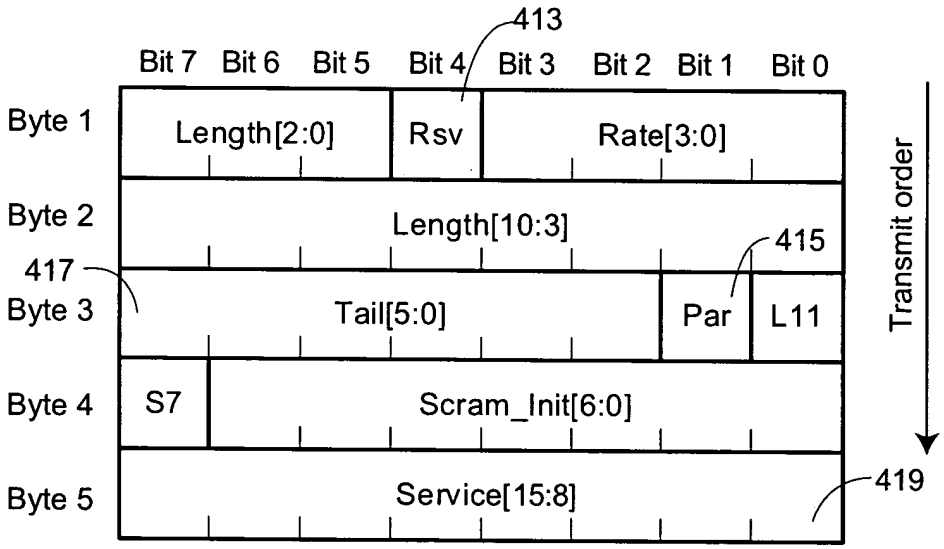

FIG. 4B (Prior Art)

Rsv = Reserved
Par = Parity
L11 = Length[11]
S0 = Service[7]

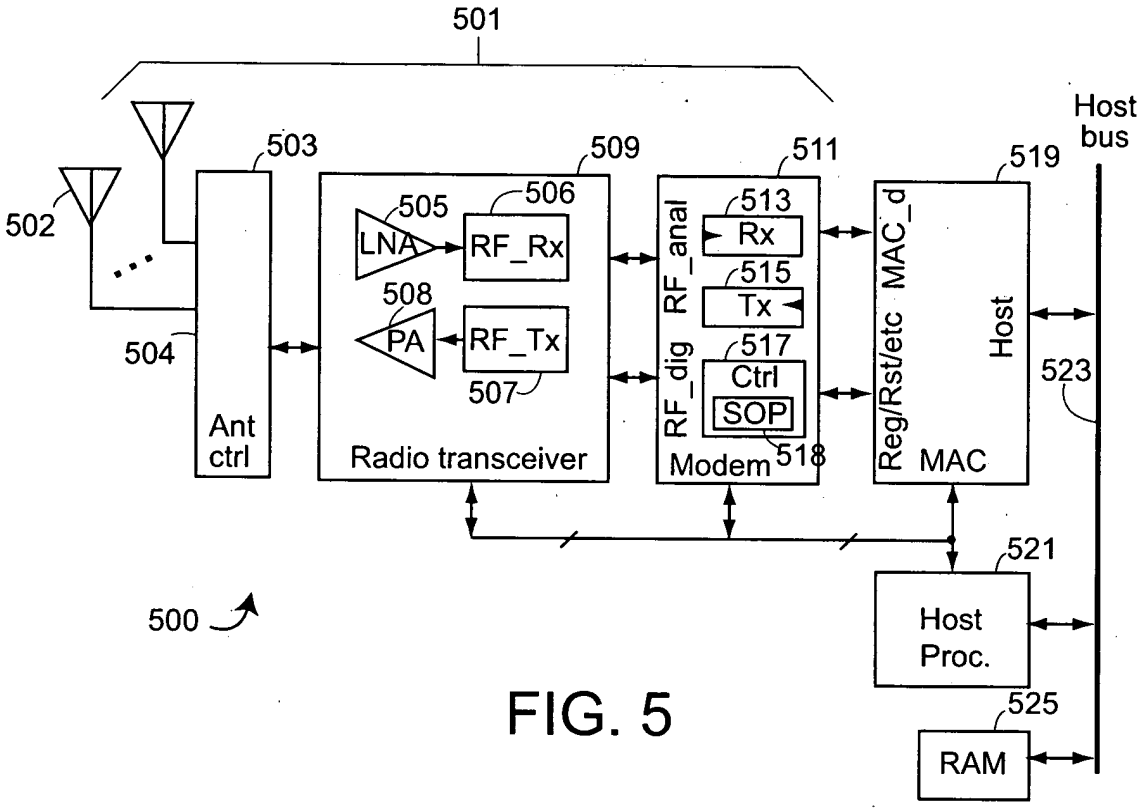
501
Host bus
503
509
511
519
502
505
506
LNA
RF_Rx
513
Rx
RF_anal
MAC_d
508
515
Tx
PA
RF_Tx
504
517
Ctrl
SOP
RF_dig
Reg/Rst/etc
Host
523
Ant ctrl
507
Radio transceiver
Modem
518
MAC
521
Host Proc.
500
525
RAM

FIG. 5

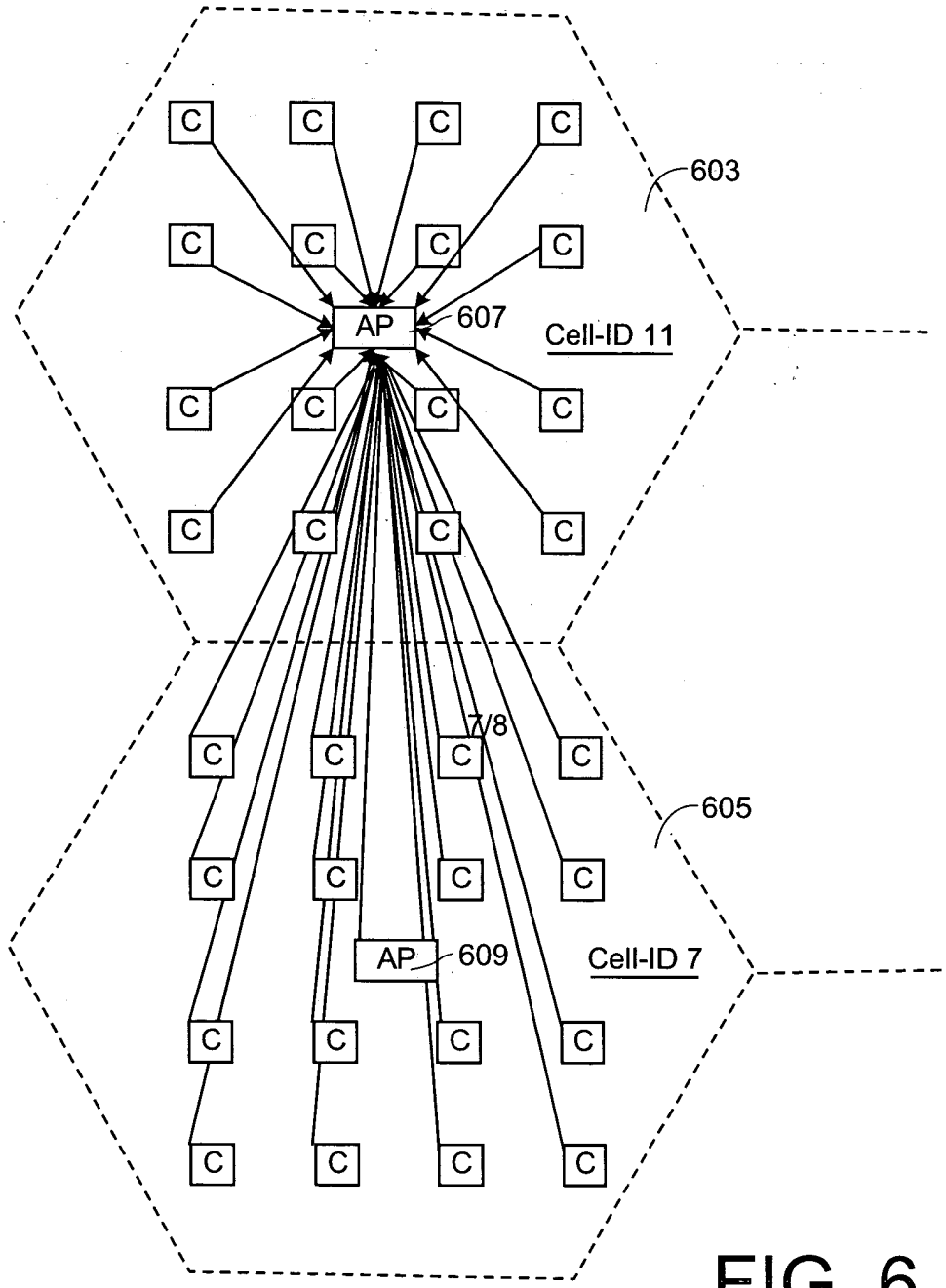

FIG. 6

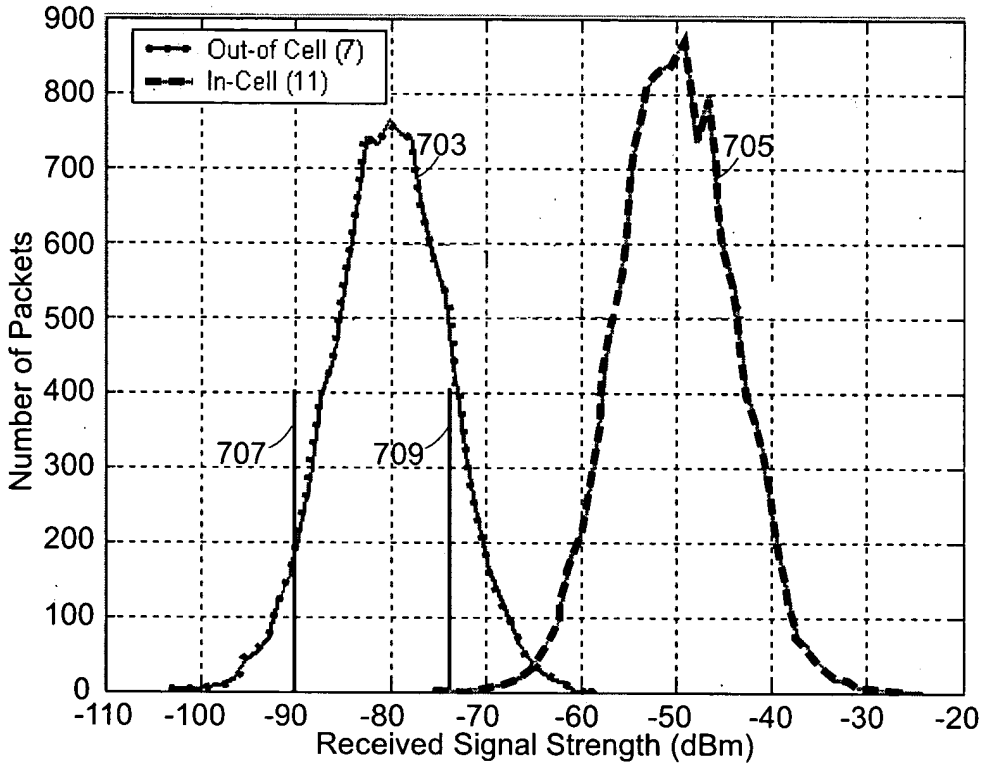
Out-of Cell (7)
In-Cell (11)
703
705
707
709
Number of Packets
Received Signal Strength (dBm)
900
800
700
600
500
400
300
200
100
0
-110
-100
-90
-80
-70
-60
-50
-40
-30
-20

FIG. 7

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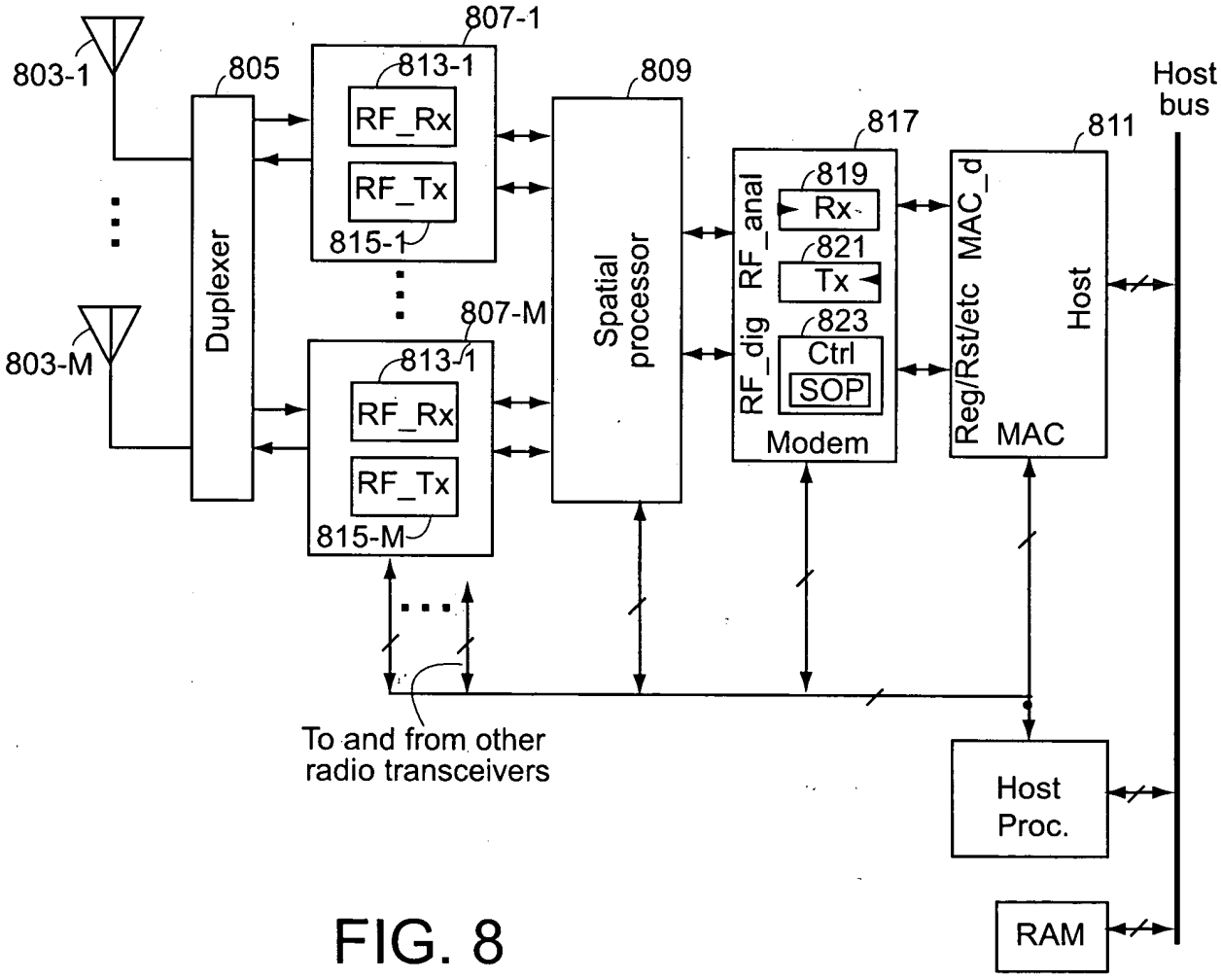
803-1
803-M
805
Duplexer
807-1
813-1
RF_Rx
RF_Tx
815-1
807-M
813-1
RF_Rx
RF_Tx
815-M
809
Spatial processor
817
RF_anal
RF_dig
819
Rx
821
Tx
823
Ctrl
SOP
Modem
811
Reg/Rst/etc
MAC_d
Host
MAC
Host bus
To and from other radio transceivers
Host Proc.
RAM

FIG. 8